UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

65913

7590

09/17/2009

EXAMINER

NGHIEM, MICHAEL P

ART UNIT PAPER NUMBER

NXP, B.V. NXP INTELLECTUAL PROPERTY & LICENSING M/S41-SJ

1109 MCKAY DRIVE SAN JOSE, CA 95131 2863 DATE MAILED: 09/17/2009

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567.172	02/03/2006	Hendrik Visser	US03 0276 US2	9638

TITLE OF INVENTION: CALIBRATION OF TESTER AND TESTBOARD BY GOLDEN SAMPLE

APPLN.	ГҮРЕ	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovi	sional	NO	\$1510	\$300	\$0	\$1810	12/17/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where m

appropriate. All further indicated unless correct maintenance fee notifica	ed below or directed oth	ng the Patent, advance on the nerwise in Block 1, by (a	rders and notification a) specifying a new co	of m orres	naintenance fees w pondence address;	/ill be and/or	mailed to the current (b) indicating a sepa	correspondence add ate "FEE ADDRE:	lress as SS" for
CURRENT CORRESPOND		Note: A certificate of mailing can only be used for domestic mailings of Fee(s) Transmittal. This certificate cannot be used for any other accompany papers. Each additional paper, such as an assignment or formal drawing, m have its own certificate of mailing or transmission.				canving			
M/S41-SJ	Y & LICENSING		Certificate of Mailing or Transmission  I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.						
1109 MCKAY DRIVE SAN JOSE, CA 95131								(Depositor	r's name)
,,								(Si	ignature)
									(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CONFIRMATION I	NO.
10/567,172 TITLE OF INVENTION	02/03/2006 N: CALIBRATION OF T	ESTER AND TESTBOA	Hendrik Visser RD BY GOLDEN SA	MPL	E	Ţ	JS03 0276 US2	9638	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE D	UE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1510	\$300		\$0		\$1810	12/17/2009	<del></del>
EXAM	INER	ART UNIT	CLASS-SUBCLASS	3					
NGHIEM, N	MICHAEL P	2863	702-085000		l.				
"Fee Address" ind PTO/SB/47; Rev 03-(Number is required.  3. ASSIGNEE NAME A PLEASE NOTE: Un	AND RESIDENCE DATA	" Indication form	data will appear on the	rnativesingles or a strong like por type he pa	rely, e firm (having as a gent) and the nameneys or agents. If printed. e) etent. If an assign	memb es of u no nam	er a 2 p to lee is 3	cument has been f	ïled for
(A) NAME OF ASSI	riate assignee category or	categories (will not be pr		(Plea	Individual 🖵 Co	orporati	,		rnment
Publication Fee (No small entity discount permitted)  Advance Order - # of Copies			☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number						
	ns SMALL ENTITY state	is. See 37 CFR 1.27.	* *				ΓΙΤΥ status. See 37 CF		
NOTE: The Issue Fee an interest as shown by the	nd Publication Fee (if requestroords of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other the Office.	nan th	ne applicant; a regi	stered :	attorney or agent; or th	assignee or other p	party in
Authorized Signature					Date				
Typed or printed name			Registration No.						
an application Confiden	tiality is governed by 35 d application form to the ions for reducing this bu. Jirginia 22313-1450. DC	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	1.14 This collection i	e ecti	imated to take 12 i	minuted	to complete including	raatherina prepari	na and

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



### UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/567,172	02/03/2006 Hendrik Visser		US03 0276 US2	9638	
65913 75	90 09/17/2009		EXAM	INER	
NXP, B.V.		NGHIEM, MICHAEL P			
	UAL PROPERTY & I	LICENSING	ART UNIT	PAPER NUMBER	
M/S41-SJ 1109 MCKAY DR SAN JOSE, CA 95			2863 DATE MAILED: 09/17/200	9	

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)
	-	
Notice of Allowability	10/567,172	VISSER ET AL.
Notice of Anowasinty	Examiner	Art Unit
	MICHAEL P. NGHIEM	2863
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this or other appropriate communication. This application is subjective.	application. If not included tion will be mailed in due course. <b>THIS</b>
1. $\boxtimes$ This communication is responsive to <u>Communications filed</u>	on 08 July 2009, 02 March 200	9, and 10 January 2007.
2. ☑ The allowed claim(s) is/are <u>1-8</u> .		
<ul> <li>3. ☐ Acknowledgment is made of a claim for foreign priority ur</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> <li>1. ☐ Certified copies of the priority documents have</li> </ul>		
2. ☐ Certified copies of the priority documents have		
Copies of the certified copies of the priority documents and the priority documents are priority documents.	• •	
International Bureau (PCT Rule 17.2(a)).		no material stage application from the
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		oly complying with the requirements
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give		
5. X CORRECTED DRAWINGS ( as "replacement sheets") mus	t be submitted.	
(a) $\square$ including changes required by the Notice of Draftspers	on's Patent Drawing Review ( P	「O-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date		
<ul><li>(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date</li></ul>	s Amendment / Comment or in th	e Office action of
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the		
6. DEPOSIT OF and/or INFORMATION about the depo- attached Examiner's comment regarding REQUIREMENT		
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5. Notice of Informa	al Patent Application
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Summa	ary (PTO-413),
3. Information Disclosure Statements (PTO/SB/08),	Paper No./Mail 7. ⊠ Examiner's Ame	Date ndment/Comment
Paper No./Mail Date  4.  Examiner's Comment Regarding Requirement for Deposit of Biological Material		ement of Reasons for Allowance
	9.	

Art Unit: 2863

### Petition

The petition under 37 CFR 1.137(b), filed on March 2, 2009, has been granted on July 6, 2009.

### Election/Restrictions

The restriction requirement filed on April 5, 2007 has been withdrawn. Examiner maintains position filed on October 10, 2006 that a restriction of the claims is not required.

### Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given by Mr. Peter Zawilski during a telephone interview on September 8, 2009.

The application has been amended as follows:

In the drawings:

Art Unit: 2863

Fig. 1, insert a depiction of a CPU and a depiction of a memory device (see attached proposed drawing).

Replace Claim 1 with the following:

-- 1. (Currently amended) In a test apparatus for measuring the input and output characteristics of an amplifier, a method for determining test program parameters, comprising:

calculating input loss from the test apparatus power source to the input of the amplifier, defining an input loss correction factor;

calculating output loss from the amplifier output to the power meter of the test apparatus, defining an output loss correction factor;

using the input loss correction factor to determine a real input power level; using the output loss correction factor to determine a real output <u>power</u> level; and in response to the determined real input power and real output power, performing at least one of

correcting an input power level and applying the corrected input power level to the amplifier, and

correcting an output <u>power</u> level and outputting the output <u>power</u> level to a user for analyzing the amplifier. --

Replace Claim 2 with the following:

-- 2. (Currently amended) The method of claim 1 further comprising,

Art Unit: 2863

calibrating radio frequency (RF) tests as a function of the input loss correction factor and the output loss correction factor and using the calibrated tests when applying the corrected input power level to the amplifier,

wherein the RF tests include <u>tests of</u> at least one of the following: input power, output power, gain, efficiency, and detector error, linearity, and noise figure. --

Replace Claim 3 with the following:

- -- 3. (Currently amended) A method for inserting calibrating factors into an automatic test equipment (ATE) program to analyze a circuit, the method comprising:
- a) obtaining parameters from at least one golden sample, wherein the parameters include lab gain, lab input power, and lab output power;
  - b) programming parameters from the golden sample into ATE test program;
- c) obtaining measurements on ATE for the golden sample, categorize the measurements into a lookup table;
- d) calculating an uncorrected gain at small input signal for at least one small input signal value;
- e) determining a first sum of a first input loss and a first output loss from the first sum determine a first gain change;
  - f) defining a first initial output loss;
- g) calculating an initial input loss from the difference of the first gain change and the first initial output loss;

h) setting power level of the ATE to sum of input power lab and initial input loss and applying a test signal to the circuit at the set power level;

- i) measuring output power on the ATE wherein output power corresponds to an input power;
- j) calculating a corrected output power wherein the corrected output power is the sum of output power on the ATE and initial output loss, and outputting the corrected output power to the circuit to analyze the circuit. --

Replace Claim 5 with the following:

-- 5. (Currently amended) A system for calibrating test program parameters for measuring the input and out characteristics of an amplifier, the system comprising:

means for calculating input loss from the test apparatus power source to the input of the amplifier, defining an input loss correction factor;

means for calculating output loss from the amplifier output to the power meter of the test apparatus, defining an output loss correction factor;

means for using the input loss correction factor to determine a real input power level;

means for using the output loss correction factor to determine a real output <a href="mailto:power">power</a> level; and

means, responsive to the determined real input power and real output power, for performing at least one of correcting an input power level and applying the corrected input power level to the amplifier, and

correcting an output <u>power</u> level and outputting the output <u>power</u> level to a user for analyzing the amplifier. --

Replace Claim 6 with the following:

-- 6. (Currently amended) The system of claim 5 further comprising:

means for calibrating radio frequency (RF) tests using the input loss correction factor and the output loss correction factor and for using the calibrated tests to apply a test input to the amplifier, wherein the RF tests include <u>tests of</u> at least one of the following: output power, gain, efficiency, detector error, linearity, and noise figure. --

Replace Claim 7 with the following:

-- 7. (Currently amended) Used in the measuring of input and output characteristics of an amplifier, machine readable medium, comprising:

a plurality of computer-executable instructions, which when executed by a computer, perform the steps of

calculating input loss from the test apparatus power source to the input of the amplifier, defining an input loss correction factor;

calculating output loss from the amplifier output to the power meter of the test apparatus, defining an output loss correction factor;

using the input loss correction factor to determine a real input power level; using the output loss correction factor to determine a real output <u>power</u> level;

calibrating radio frequency (RF) tests as a function of the input loss correction factor and the output loss correction factor, wherein the RF tests include <u>tests of</u> at least one of the following: output power, gain, efficiency, and detector error, linearity, and noise figure;

indicating to the user the calibrating of RF tests is complete; and using the calibrated tests to apply test inputs to the amplifier. --

Replace Claim 8 with the following:

-- 8. (Currently amended) Used in the measuring of input and output characteristics of an amplifier, machine readable medium, comprising:

a plurality of computer-executable instructions, including steps for inserting calibrating factors into an automatic test equipment (ATE) program for testing the amplifier, which when executed by a computer, perform the steps of:

- a) obtaining parameters from at least one golden sample, wherein the parameters include lab gain, lab input power, and lab output power;
  - b) programming parameters from the golden sample into ATE test program;
- c) obtaining measurements on the ATE for the golden sample and categorizing the measurements into a lookup table;
- d) calculating an uncorrected gain at small input signal for at least one small input signal value;
- e) determining a first sum of a first input loss and a first output loss from the first sum determine a first gain change;

Art Unit: 2863

f) defining a first initial output loss;

g) calculating an initial input loss from the difference of the first gain change and

the first initial output loss;

h) setting the power level of the ATE to the sum of the lab input power and initial

input loss;

i) measuring output power on the ATE wherein output power corresponds to an

input power;

j) calculating a corrected output power, wherein the corrected output power is the

sum of output power on the ATE and initial output loss; and

k) determining a degree of correlation between the corrected output power with

the lab output power, and using the degree of correlation to

insert determine corrected values for insertion into the ATE test program

for input power and output power, and further applying test inputs to the amplifier

via the ATE test program with the inserted corrected values or

define another initial output loss and further using the defined other initial

output loss to perform steps g) through j) again. --

Reasons For Allowance

The combination as claimed wherein a method and system for

determining/calibrating test program parameters comprising using input loss correction

factor to determine a real input power level and using output loss correction factor to

Art Unit: 2863

determine a real output power level (claims 1, 5, 7) or calculating a corrected output power wherein the corrected output power is the sum of output power on the ATE and initial output loss (claims 3, 8) is not disclosed, suggested, or made obvious by the prior art of record.

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P Nghiem whose telephone number is (571) 272-2277. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2863

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Michael P. Nghiem/

Primary Examiner, GAU 2863

September 8, 2009